

FIG.1A

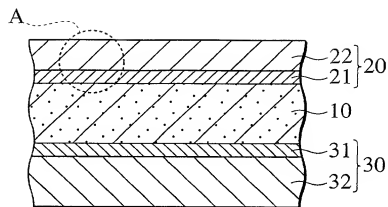


FIG.1B

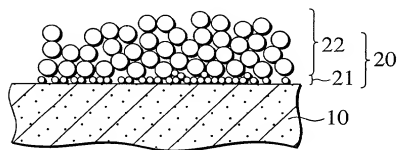


FIG.2

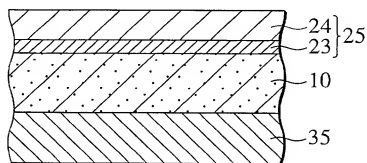


FIG.3A

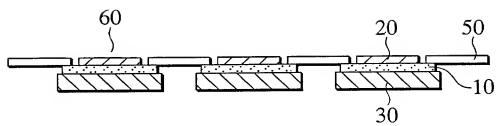


FIG.3B

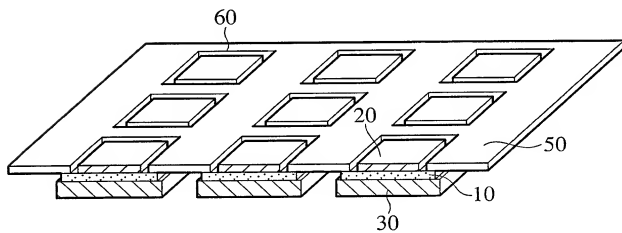


FIG.4A

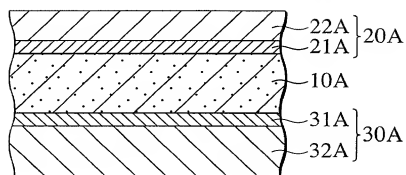


FIG.4B

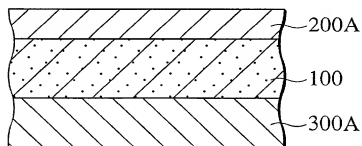


FIG.4C

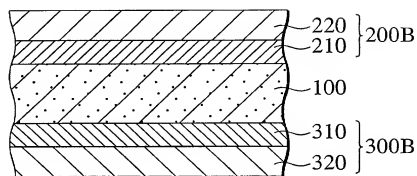


FIG.4D

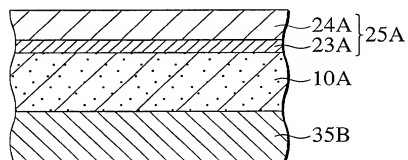


FIG.5

Table. 1

	Air electrode (Ag)		Fuel electrode (Ni)		Peeling property	Cell property ($i=0.4\text{A}/\text{cm}^2$ hour)
	Lower layer	Upper layer	Lower layer	Upper layer		
Example 1	Sputtering film : 50 nm	Splayed film : 15 μm	Sputtering film : 50 nm	Splayed film : 35 μm	OK	0.130W/cm ²
Comparative example 1	—	Splayed film : 15 μm	—	Splayed film : 35 μm	OK	0.12W/cm ²
Example 2	Splayed film : 0.1 μm	Splayed film : 15 μm	Splayed film : 0.1 μm	Splayed film : 35 μm	OK	0.127W/cm ²
Comparative example 2	—	Splayed film : 15 μm	—	Splayed film : 35 μm	×	0.123W/cm ²
Comparative example 3	Sputtering film : 2 μm	Splayed film : 15 μm	Sputtering film : 2 μm	Splayed film : 35 μm	×	0.11W/cm ²

*) The lower layer and the upper layer in the air electrode are an adhering cathode layer and an electricity collecting cathode layer respectively.

*) The lower layer and the upper layer in the fuel electrode are an adhering anode layer and an electricity collecting anode layer respectively.

FIG. 6

Tabl. 2

Example No	Electrical collecting cathode layer		Adhering cathode layer				Cell resistance (Ω)
	Material	Particle diameter	Material	Method	Baking temperature ($^{\circ}\text{C}$)	Adhesion strength (Ω)	
Example 3	LSC	$5\text{ }\mu\text{m}$	Ag	Sputtering	800	○ 0.05	2.3
Example 4	LSC	$5\text{ }\mu\text{m}$	Bismuth oxide	EB deposition	800	○ 0.11	2.5
Example 5	LSC	$5\text{ }\mu\text{m}$	Ag+LSC	Sputtering	850	○ 0.07	2.3
Example 6	LSC	$5\text{ }\mu\text{m}$	Bismuth oxide+ glass frit	Screen printing	900	○ 0.15	2.8
Comparative example 4	LSC	$5\text{ }\mu\text{m}$	Nothing	—	1100	○ —	350
Comparative example 5	LSC	$5\text{ }\mu\text{m}$	Nothing	—	800	× —	12.5
Comparative example 6	LSC	$5\text{ }\mu\text{m}$	Ag	Sputtering	850	○ 0.21	56.2
Comparative example 7	LSC	$5\text{ }\mu\text{m}$	Bismuth oxide+ glass frit	Screen printing	500	× 0.18	3.5

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